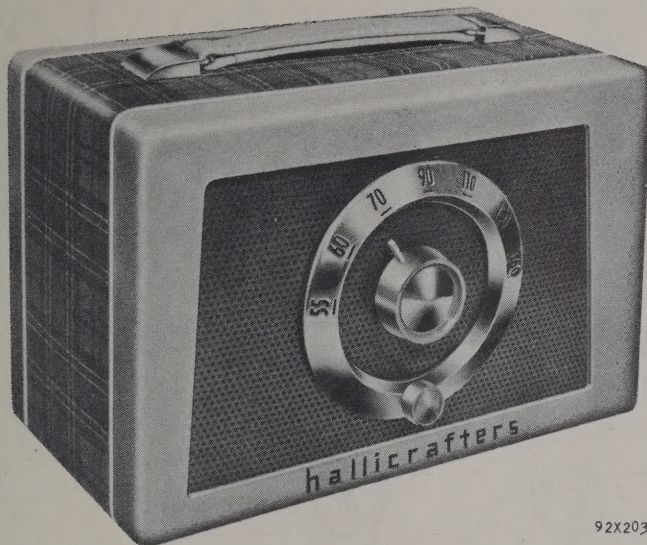


SERVICE INSTRUCTIONS

MODEL TW-25 (Runs 1 & 2) 3-WAY PORTABLE RADIO



Model TW-25

92X2034

SPECIFICATIONS

Tubes and Rectifiers. 4 tubes and 1 selenium rectifier
Power Supply. 105-120 volts DC/50-60 cycle AC or 90 and 7½ volt batteries
Frequency Coverage. 535 to 1620 KC
Intermediate Frequency 455 KC
Speaker. 4-inch PM
Voice Coil Impedance 3.2 ohms
Antenna Built-in stick loop

REPLACEMENT BATTERIES

7½ Volt "A" - Hallicrafters P-13, General 31, RCA VS065, Burgess C5, Eveready 717, Ray-O-Vac P751
90 Volt "B" - Hallicrafters P-231, General 132, RCA VS090, Burgess N60, Eveready 490, Ray-O-Vac 4390

ALIGNMENT PROCEDURE

- Connect output meter across voice coil.
- Set volume control at maximum.
- Use a non-metallic alignment tool.
- Refer to Fig. 1 for location of alignment adjustments.
- Generator must have modulated output and cover 455 KC, 600 KC, 1400 KC and 1620 KC.
- To avoid AVC action use lowest output setting of generator that gives a satisfactory reading on meter.

| Step | Signal Generator Connections | Generator Frequency | Receiver Dial Setting | Adjust for Maximum Output |
|------|--|---------------------|-----------------------|--|
| 1 | High side thru .01 mfd capacitor to pin 6 of 1R5. Low side to B- (pin 1 of 1U5). | 455 KC | Gang half meshed. | A and B (2nd IF) C and D (1st IF) |
| 2 | Same as Step 1. | 1620 KC | Gang fully open. | E (osc. trimmer) |
| 3 | Radiate generator signal into stick loop antenna. | 1400 KC | Tune in gen. signal. | F (ant. trimmer) |
| 4 | Same as Step 3. | 600 KC | 600 KC | Coil on stick loop antenna (move slightly to left or right). |
| 5 | Repeat Step 3. | | | |

the hallicrafters co.

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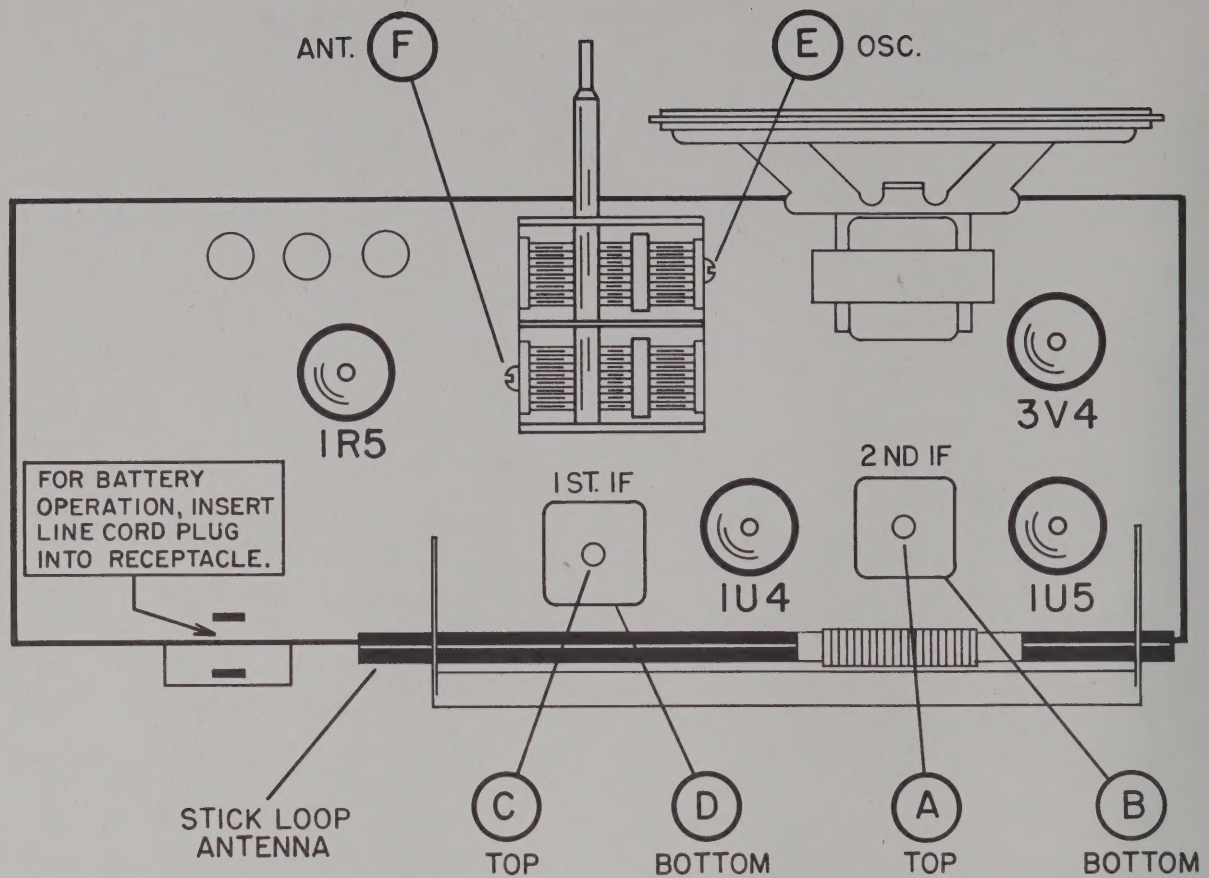


Fig. 1. Top View of Chassis Showing Location of Alignment Adjustments and Tubes

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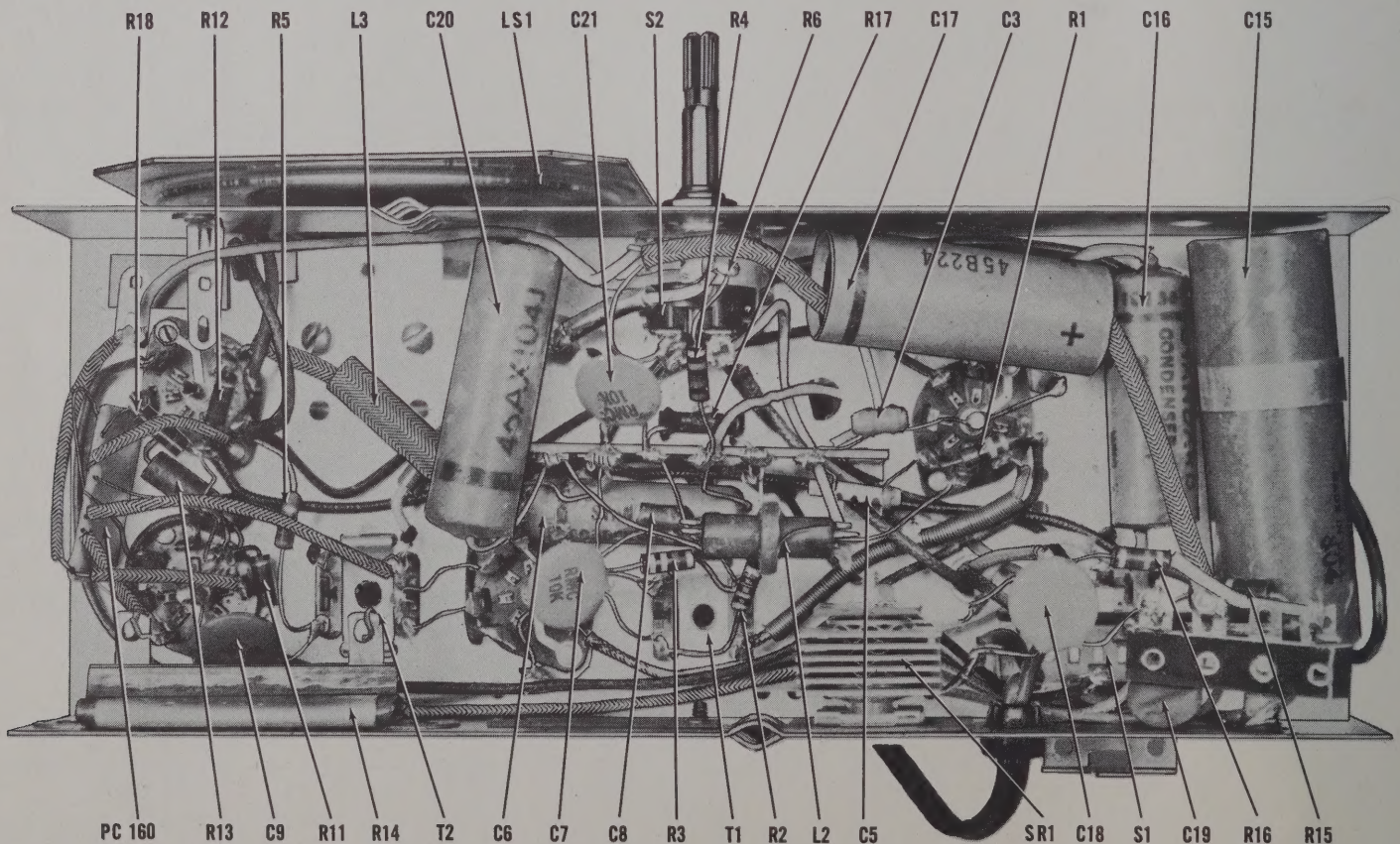
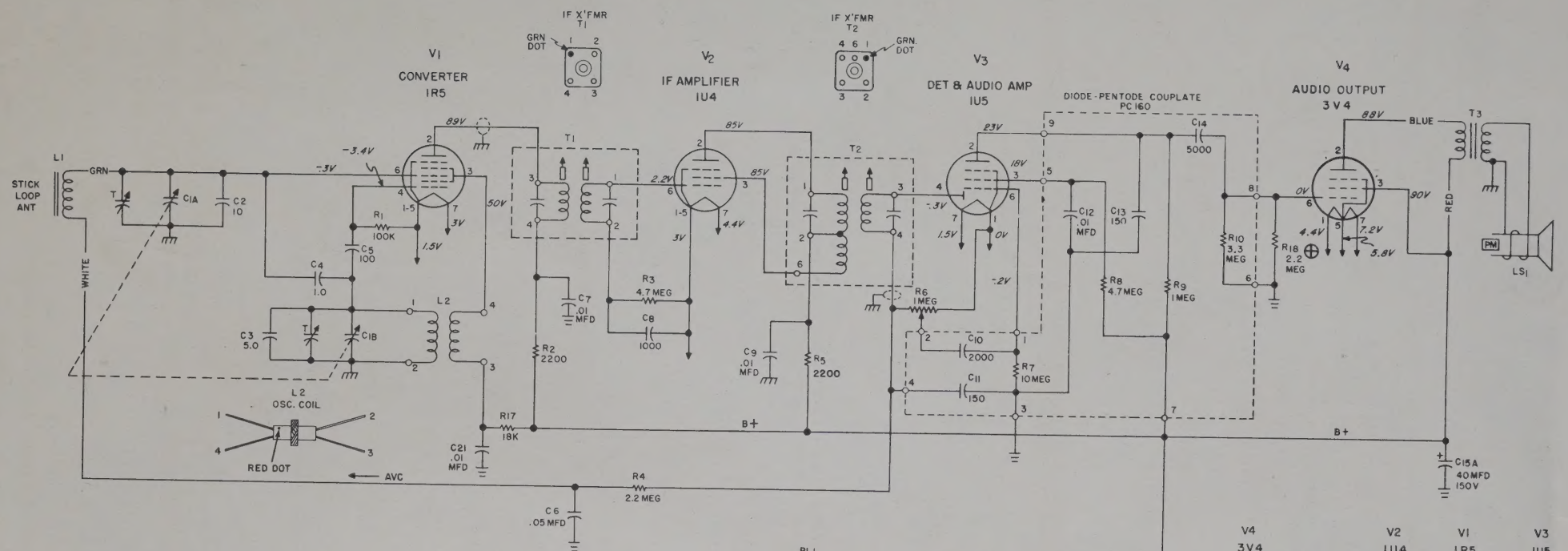


Fig. 2. Bottom View of Chassis Showing Component Location

92X2060

MODEL TW-25

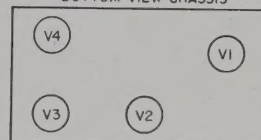
RUNS 1 & 2



NOTES

1. RESISTANCE INDICATED IN OHMS AND CAPACITANCE IN MMF UNLESS OTHERWISE SPECIFIED.
 2. RESISTORS HAVE 1/2 WATT RATING UNLESS OTHERWISE SPECIFIED.
 3. INTERMEDIATE FREQUENCY - 455 KC.
 4. LINE VOLTAGE - FOR AC/DC OPERATION - 117 VOLTS, 50/60 CYCLES.
FOR BATTERY OPERATION - 7 1/2 V. "A" AND 90 V. "B".
 5. ALL VOLTAGES ARE MEASURED WITH A VACUUM TUBE VOLTMETER (VTVM) AND ARE DC AND POSITIVE UNLESS OTHERWISE SPECIFIED.
 6. ALL VOLTAGES ARE MEASURED BETWEEN TUBE SOCKET TERMINALS AND B- (PIN 1 OF 1U5) WITH ANTENNA TERMINALS SHORTED AND TUNING GANG FULLY MESHED.
 7. K=1000
- * PART OF VOLUME CONTROL R6.
B-(COMMON GROUND)
CHASSIS
- SWITCH S1 SHOWN IN AC/DC POSITION. TO PLACE SWITCH IN BATTERY POSITION, INSERT LINE CORD PLUG INTO CHASSIS RECEPTACLE.
- IN SOME SETS, R-14 IS REPLACED BY (1) 2700 OHM 8 WATT WW RESISTOR AND (1) 22K OHM 1 WATT RESISTOR CONNECTED IN PARALLEL.
- USED IN "RUN 2" SETS ONLY.

BOTTOM VIEW CHASSIS



VALUES AND TOLERANCES SHOWN ARE NOMINAL AND VARIATIONS MAY BE FOUND. IT IS RECOMMENDED THAT THE VALUE OF ANY REPLACEMENT CORRESPOND TO THE NOMINAL VALUE OF THE PART BEING REPLACED

SERVICE PARTS LIST

[illegible]

* Part of diode-pentode couplate PC-160